Food and Agriculture Organization of the United Nations

Case study

Chile

The National Forest Monitoring System as part of the National Strategy on Climate Change and Vegetation Resources in Chile

Applying state-of-the-art monitoring approaches in forest conservation, restoration and management

Context

Since 2010, Chile has been working to reduce emissions from deforestation and forest degradation and enhancement on forest carbon stocks (REDD+). The Chilean strategy on climate change and vegetation resources (Estrategia Nacional de Cambio Climático y Recursos Vegetacionales, ENCCRV) has been promoted by the Ministry of Agriculture (Ministerio de Agricultura, MINAGRI) through the National Forestry Corporation (Corporación Nacional Forestal, CONAF). ENCCRV responds to the demands of the United Nations Framework Convention on Climate Change, specifically for the Land Use, Land-Use Change and Forestry sector and for REDD+, involving operational efforts for climate change mitigation and adaptation.

In March 2018, CONAF published the Monitoring and Measurement System (Sistema de Medición y Monitoreo, SMM) as part of the ENCCRV, which encompasses the national forest monitoring system (NFMS). In its design, the SMM includes a detailed description of the institutional arrangements and structure; the sources of information related to each of the different integrated systems; the planning of activities for the development of cross-sectoral improvements and report generation; the available financing; and the sustainability strategy, all with an established planning horizon until 2025.

Challanges

Challenges to be faced include: uncertainty in the estimation of greenhouse gas (GHG) emissions and removals, low quality of data and information to support international reporting requirements and low institutional technical capacities at national level, both in CONAF and in other governmental institutions and academia.

Replicability and upscaling

The SMM is founded on the pillars of transparency, precision and consistency and allows for revisions. The replicability of the calculated estimations is being developed for a series of institutional arrangements that contribute to its design, implementation and execution.

Actors and stakeholders

Since 2014, CONAF has been the executing and coordinating entity of the ENCCRV and the focal point for REDD+. CONAF fulfils its role through the Unit of Climate Change and Environmental Services of the Upper Management of Forestry Development and Promotion, whichis in charge of coordinating the generation and reporting of elements linked to REDD+, including coordination of the NFMS. Together with CONAF, the Forestry Institute (Instituto Forestal, INFOR) under MINAGRI is responsible for conducting national forest inventories and plays a key role in the forestry sector and the NFMS. The NFMS is supported by national funding from CONAF and INFOR and by international funding from the National UN-REDD Programme, the Forest Carbon Partnership Facility's Carbon Fund and the Global Environment Facility Trust Fund.

Objectives

- Provide transparent, consistent and accurate data and information over time, which allows the dissemination of the results of the ENCCRV's interventions.
- Include the necessary elements to access results-based payments for REDD+.
- Cover the monitoring and reporting requirements of the Paris Agreement on forestry and land use.
- Strengthen the National Greenhouse Gases Inventory.
- Respond to the requirements of the United Nations Convention to Combat Desertification and its mechanism for Land Degradation Neutrality.
- Link the monitoring of implementation of the ENCCRV with that of the Aichi Biodiversity Goals of the Convention on Biological Diversity.
- Contribute to the monitoring of national contributions in the fulfilment of the Sustainable Development Goals.
- Contribute to the provisions of the strategic axes of the United Nations Forum on Forests.

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Success factors

- **Institutionalization of the NFMS:** In 2017, MINAGRI institutionalised an interministerial structure that allows adequate organization of actions in the area of mitigation and adaptation to climate change. The intersectoral institutional arrangement became official through Exempt Decree No. 360, which creates the Interministerial Technical Committee on Climate Change.
- **Participatory discussion process:** An integrated participatory process that involves stakeholders at national and regional level under the leadership of CONAF has been implemented within the framework of the ENCCRV. Consultation workshops are conducted, involving experts from public institutions, civil society and academia, to ensure the participatory design of the NFMS.
- **Feasibility and cost-efficiency:** CONAF's budget is constantly increasing, providing the capacity to enforce forestry laws aimed at preventing deforestation and degradation, with additional support from international funds.

Testimony

Georgina Trujillo, Measurement, Reporting and Verification (MRV) coordinator at CONAF, Ministry of Agriculture of Chile has stated:

> *"Chile has advanced in the use of more up-to-date and more precise technologies, which has undoubtedly allowed us to make significant improvements in forest monitoring. However, there are still important challenges to reduce the uncertainties of the results, especially when the country wants to move towards having an NFMS at national level. This initiative tackles this challenge directly, which will undoubtedly increase the transparency of the data applied to forest monitoring in Chile."*

Related resources

National Forestry Corporation (CONAF). 2018. *Measurement and Monitoring System of the National Strategy for Climate Change and Vegetation Resources.* Santiago. 72 pp. Also available at: https://redd.unfccc.int/files/sistema_de_medici__n_y_monitoreo__updated_.pdf

National Forestry Corporation (CONAF). 2019. *Modified Technical Annex on REDD+*, Chile. 81 pp. Also available at: https://unfccc.int/sites/default/files/resource/063724851_Chile-BUR3-1-Chile%20REDD%20%20Spanish_0.pdf

Impact

- The SMM is made up of a series of systems, institutional arrangements and sources of information, focusing in greater depth and detail on the NFMS, but within a broader vision.
- Data and information on the results of the ENCCRV are available across four thematic areas, namely:
  1. general structure of the SMM;
  2. mitigation of climate change; forest-related GHG emissions and removals;
  3. evaluation of the state of desertification, land degradation and drought; and
  4. non-carbon benefits from ENCCRV measures.
- The platform is composed of spatial and alphanumeric databases, including a semi-automatic integration tool for information and a web mapping visualizer. The platform has different user profiles, which allow for:
  1. development of the reports;
  2. reconstruction of the information;
  3. performance of specific consultations semi-automatically; and
  4. dissemination of the information clearly and transparently.
- Maps on land use and land-use changes with biennial periodicity and consistent with the Forest Cadastre are developed and future data available for estimating the soil organic carbon stock changes are improved.
- In 2020, the Integrated National Monitoring and Assessment System on Forest Ecosystems (Sistema integrado de Monitoreo de Ecosistemas Forestales, SIMEF) was launched, with the support of FAO Office in Chile. The SIMEF platform contains tools that can be used to consult, analyse and download information on Chilean forests and ecosystems.

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For more information, please visit:
The Monitoring and Measurement System (SMM):
www.enccrv.cl/medicion-y-monitoreo
National Monitoring and Assessment System on Forest Ecosystems (SIMEF):
https://simef.minagri.gob.cl/que-es-simef
For more information, please contact: **uccsa.chile@conaf.cl**

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